MEDICAL INSPECTION OF PRISONERS AT SAN QUENTIN WITH REPORT OF CASE OF TINEA VERSICOLOR.

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Each prisoner upon entering San Quentin prison is subjected to a thorough physical examination. As soon as he enters he is taken to the turnkey's office, properly registered, and instructed as to his privileges and requirements. After a bath, a shave, and a cropping of the hair he is taken to the Bertillon room, where his physical measurements are tabulated, as well as any scars, deformities, birthmarks and the imprints of the palmar surfaces of his thumbs and fingers. His face is photographed both from in front and laterally for records of identification.

At the hospital, where the prisoner next goes, a complete medical history is taken by one of the physicians who are serving sentences. This history begins with date, age, occupation, weight, family encumbrence, and length of sentence. The family history has to do with the health, drug and alcoholic addictions, sanity, tuberculous and malignant tendencies of both maternal and paternal sides. The health of the brothers and sisters, with notes of family deaths, is carefully recorded.

The past history of the convict embraces childhood diseases, infections, accidents, venereal troubles, stomach and bowel disturbances, nervous peculiarities and all affections of the heart and lungs. Alcoholic, drug and tobacco addictions are written down.

The physical examination is dictated by one of the prison physicians to a scribe who places it on the history blank. The examination starts with the noting of the condition of the head, its scars, deformities and peculiarities. The color and size of the ears and hearing ability are noted. The eye examination includes the color of the conjuctivæ and scleræ, equality of pupils and their reaction to light and accommodation. The air spaces, spurs and septal deflections of the nose are noted. The condition of the lips, teeth, gums, tongue, tonsils and pharynx is carefully inspected.

Glandular enlargements, abnormal pulsations, hyperthyrea and muscular condition of the neck is examined in turn. The chest is inspected, palpated, percussed and auscultated during normal breathing and by holding the breath and coughing. The heart measurements are taken, pulse rate, rythm and murmurs, if any, noted.

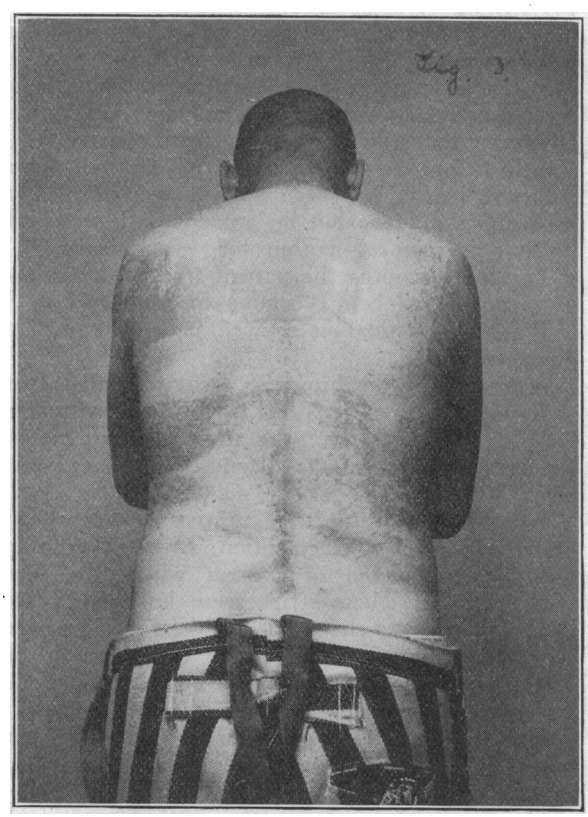
Posteriorly the lungs receive the same examination, stress being laid on the clearness of the bases and apices.

The area of liver dullness and the percussability of the spleen are included in the examination of the abdomen.

The external genitals are carefully examined for acute infections, varicocele, hernias and other affections of this region. Note is made of the musculature of the legs and arms, tendencies to arteriosclerosis and varicosities.

Reflexes and glandular enlargements are ascertained.

During all this examination, if there be any remediable defects, such as enlarged tonsils, deflected septum, hernia, varicocele, etc., such defect is recorded in the "Operation Book," and the prisoner advised that he will be called at an early date for the necessary operation if he so desires.



Upon completion of the examination a signed statement of the prisoner's physical condition is sent to the Captain of the Yard, who has charge of the detailment of the men to their work. Recommendations are made by the physician as to the kind of work the physical condition will allow. No man is assigned to duty in the jute mill who has epileptic fits, tuberculous tendencies, eye affections or physical deformities which contraindicate such work.

When it is realized that approximately three prisoners enter San Quentin prison every day, it is obvious that many interesting cases come before the medical directors.

The accompanying photograph shows some peculiar skin markings of a convict who came to the prison in February, 1913. Upon being stripped, a brownish, somewhat elevated discoloration was noticed covering the upper part of the thorax and the upper part of the abdomen as well as about the genitals. Extending in a band eight c.m. in width across the chest just above the nipples and around on to the back and at right

angle over the right shoulder, simulating Sayre's bandage, was an area almost entirely devoid of this pigmentation and presenting almost entirely normal skin.

Patient's family history not applicable to case—age 50 years, married, real estate broker, weight 194 lbs., previous health good. Gonorrhœa 30 years ago, no syphilis, moderate drinker and smoker. Has been troubled with constipation and hemorrhoids. History otherwise negative.

Present history—Prisoner had never noticed pigmentations of his skin before, and had not had any itching or other trouble to direct his attention to the skin. He was surprised at his markings when attention was attracted to them, but declared he had never worn tight-fitting clothing or been supported by braces. On close questioning, however, he remembered in April, 1912, nine months before, he had dislocated his right shoulder. Adhesive plaster had been applied about his chest, back and shoulders, but on account of its irritability it was removed within forty-eight hours.

For three months the patient had been confined in a county jail before coming to San Quentin.

Physical examination showed patient normal in other respects.

A portion of the brownish skin was scraped off and mounted with 10% sol. of sodium hydroxide. With 1/6 objective, the mycelia were plainly visible substantiating the diagnosis of Tinea versicolor.

In order to prove the curative power of adhesive plaster in this condition, strips of ordinary plaster were placed over areas where the tinea was thickest. These strips were left on 24 and 48 hours respectively. On removing the first one the skin appeared to be normal and some of the brownish discoloration remained on the plaster. A few patches subsequently reappeared in this area.

The second strip applied for 48 hours has permanently cured the disease over the area on which it was applied.

One area where it was impracticable to apply adhesive a 12% solution of sodium hyposulphite was applied several nights in succession. This succeeded in curing the disease.

A CASE OF HEMOGLOBINURIA.

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The following case of hemoglobinuria presents some points of interest aside from the rarity of the condition here.

E. F. W., age 46. born in Boston, Mass., occupation, guard, P. P. I. Exposition. First seen March 9, 1916. Patient complains of highly colored urine, which he first noticed two days before, accompanied by severe repeated vomiting. Has not been feeling well for two weeks, having had "flashes" of fever, insomnia, and anorexia.

Father died at 46 of tuberculosis; mother at 56 of rheumatism. Two sisters, one of whom died of measles, and the other of childbirth. One brother, alive and well at 54.

In early childhood patient had whooping cough, diphtheria, measles, scarlet fever and mumps. Had epilepsy with attacks every three or four months up to the age of 13, and none since. Pneumonia 20 years ago. Typhoid in 1896. Went south first in the army in 1898, and had repeated attacks of malaria in Florida. Went to Manila in 1899 and had no malaria till 1906, when an attack kept him in the hospital for a month. From that time he had no known attacks of malaria, nor any other illness to the present time, except gonorrhoea in 1911. Never had syphilis. Came to San Francisco from Manila, December, 1914, and has never left the city since, even for a trip. Has taken no medicine.

The patient is a well-built, rugged-looking man, weighing 185 lbs. Face flushed. Sclera faintly yellow. Temperature 99.2°. Pulse 72. Blood pressure, systolic 138, diastolic 85. Chest negative. Spleen not palpable or tender. Liver, normal. Slight tenderness on deep palpation over left kidney and bladder. Urinates frequently, and has slight burning sensation on urination.

Urine. Reaction, strongly acid; specific gravity 1010. Albumin by nitric acid layer test +++. Turbid. Yellowish-red by transmitted light; reddish-brown by reflected light. On standing there is a light brown flocculent sediment. On centrifugation of the fresh specimen there is 3% of brownish-black compact sediment, and a brown clear fluid. Microscopically, the sediment is nearly all amorphous brown material, with a very few red cells, leucocytes and epithelial cells. Negative for B. Tuberculosis. The blood does not show any parasites of malaria or pigment in the fresh spread or in the layer beneath the leukocytes in the centrifugated specimen. (Bass method) 2cc. of blood were added directly to 5cc. of citrated salt solution and centrifugated. The clear supernatant fluid showed a color, as viewed through a test tube, 16mm. in diameter, estimated as 15% by comparison with the Tallquist scale.

The stool was negative for ova of animal parasites. The complement fixation test, performed by Clegg in the Public Health Service Laboratory, was negative, both with Wassermann and Noguchi antigens. The blood for this test was drawn March 13. At the same time 1cc. of blood was added to 5cc. of citrated salt solution and centrifugated. the supernatant fluid was of a pale straw color. No malarial pigment was found on examination of the leucocyte layer. The specimen was shaken and left for 24 hrs. at room temperature. No hemolysis occurred.

The urine improved slowly, changing in color to yellow by March 16. Hemoglobin derivatives were shown by Heller's test till March 25, and by the benzidine test on the next day. Casts of brown amorphous material appeared, and on the 21st there was an increase of red cells. Albumen was found daily by the nitric acid layer test till March 27, when this test was negative.

Blood examination following admission showed: red blood cells 4,000,000. Hemoglobin (Tallquist, 65%. Leucocytes 6000. Slight poikilocytosis with shadows. No nucleated reds.

Polymorphonuclear neutrophiles	63%
Large mononuclear	19%
Lymphocytes	7%
Transitional	3%
Neutrophile myelocytes	4%
Polynuclear eosinophiles	4%

On the next day the hemoglobin was 55%. Two days later the results were as follows: red cells, 4,300,000; hemoglobin 55%.

Polymorphonuclear neutrophiles	62.5%
Large mononuclear	13.5%
Lymphocytes	19.5%
Transitional	1.5%
Neutrophile myelocytes	1.5%
Polynuclear eosinophiles	1.0%
Mast cells	0.5%

On the 23d the hemoglobin was 68%; red cells, 4,600,000. The patient lost 18.5 lbs. during the first 11 days, and gained a half a pound in the next week.